



Todo Droga

Química Mayorista

Certificate of Analysis

Nutrinova® Sorbic Acid; 40 x 25 kg sack on pallet

Customer No.:	1194019	Cert Issue Date:	14 Feb 2014
Material No.:	20008714	Qty Shipped:	5,000.000 KG
Produced at:	Frankfurt am Main	Order Item /date:	1379402 20 / 07 Oct 2013
Produced on:	03 Jan 2014	Delivery item/date:	83067276 900003 / 15 Feb 2014
Best before date:	02 Jan 2017	Customer PO No.:	PRO FORMA ORDER FOR MCASSAB
Country of origin:	Germany		

Batch 0000670409

On the batch, of which the consignment is a part, the following values were determined.

Characteristic	(Method)	UoM	Value	Limits
Abs. max. (in Water)	(UV)	nm	263.7	262.0 - 266.0
Appearance	VISUAL		white, crystalline powder	
Assay	(FCC, Titrimetric)	%	99.8	99.0 - 101.0
Heat Test (90 min/105°C)	(EC)		no discoloration	
Identity Sorbic acid	(UV)		Pass	
Water content	(Karl Fischer)	%	0.21	max. 0.50

The following values are based upon statistical evaluation and are adhered to with each batch.

Aldehydes (as Formaldehyde)		%	< 0.10	max. 0.10
Heavy metals (calc. as lead)	(Limit-Test)	ppm	< 10	max. 10
Lead	(ICP MS)	ppm	< limit of detection	0.02 - 0.10
Arsenic	(ICP MS)	ppm	< limit of detection	0.02 - 0.10
Mercury	(AAS)	ppm	< limit of detection	0.01 - 0.01
Cadmium	(ICP MS)	ppm	< limit of detection	0.02 - 0.02
Zinc	(ICP MS)	ppm	< limit of detection	0.04 - 0.10
Chloride	(IC, JSFA)	ppm	25.8	0.0 - 100.0
Sulfate	(IC)	ppm	26.9	0.0 - 150.0
Melting Range	(FCC)	°C	Pass	132 - 135
Residue on Ignition	(FCC)	%	< 0.10	max. 0.10

Nutrinova® Sorbic Acid meets the purity specifications of the FAO/WHO, those of the Food Chemicals Codex, those of the JSFA, the guidelines